

From: LUT Agnes <LUT.Agnes@deq.state.or.us>
Sent time: 01/25/2012 02:42:03 PM
To: Brown, Chad (ECY) <CHBR461@ECY.WA.GOV>; Cope.Ben@epamail.epa.gov
Subject: RE: Treaty Review: STT Water Quality Work Group Discussion of Temperature Metrics, Locations and Models

Works for me.
Thanks for setting up!

Agnes-

Agnes Lut
ODEQ - Water Quality
503-229-5247

-----Original Message-----

From: Brown, Chad (ECY) [mailto:CHBR461@ECY.WA.GOV]
Sent: Wednesday, January 25, 2012 2:40 PM
To: Ben Cope; LUT Agnes
Subject: RE: Treaty Review: STT Water Quality Work Group Discussion of Temperature Metrics, Locations and Models

Does 1:30-2:30 tomorrow afternoon work for both of you?

Here is the call-in #

(b) (6) (b)
(b) (6)

Chad

-----Original Message-----

From: Ben Cope [mailto:Cope.Ben@epamail.epa.gov]
Sent: Wednesday, January 25, 2012 2:24 PM
To: LUT Agnes
Cc: Brown, Chad (ECY)
Subject: RE: Treaty Review: STT Water Quality Work Group Discussion of Temperature Metrics, Locations and Models

I don't have anything on my calendar yet. I'm available except for 9 - 10:30. -BC

Ben Cope, Environmental Engineer
Office of Environmental Assessment
EPA Region 10
Seattle, Washington
206-553-1442

From: LUT Agnes
To: Ben Cope/R10/USEPA/US@EPA
Cc: "Chad.brown@ecy.wa.gov"
Date: 01/25/2012 02:10 PM
Subject: RE: Treaty Review: STT Water Quality Work Group Discussion of Temperature Metrics, Locations and Models

Are we having a conference call on Thursday, tomorrow?
What time?

Agnes-

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503-229-5247

From: Ben Cope [mailto:Cope.Ben@epamail.epa.gov]
Sent: Thursday, January 19, 2012 10:48 AM
To: LUT Agnes
Subject: RE: Treaty Review: STT Water Quality Work Group Discussion of
Temperature Metrics, Locations and Models

Thanks Agnes. I felt the need to throw that email out there.

How exactly can Matt Rea restrict the use of a public domain model developed by public agencies with tax money? This attitude is exactly why I requested copies of all model files.

They will probably plow ahead, and I don't have time to attend all the meetings. I just didn't want them to say EPA supported the development and expense of a different model (tacitly - since I was cc'd). And I want the product of all this expenditure.

Cheers from snowy Ballard.

-B

Ben Cope, Environmental Engineer
Office of Environmental Assessment
EPA Region 10
Seattle, Washington
206-553-1442

-----LUT Agnes wrote: -----
To: Ben Cope/R10/USEPA/US@EPA
From: LUT Agnes
Date: 01/19/2012 09:53AM
Subject: RE: Treaty Review: STT Water Quality Work Group Discussion of
Temperature Metrics, Locations and Models
Ben
Wow, I wish you were there to back me up yesterday!
I was the lone black sheep in the room! Luckily Stewart Rounds was
there to help guide the conversation!

All of your points below, I made yesterday!

Agnes-

Agnes Lut
ODEQ - Water Quality
503-229-5247

From: Ben Cope [mailto:Cope.Ben@epamail.epa.gov]
Sent: Thursday, January 19, 2012 9:34 AM
To: Stewart Rounds
Cc: Etheridge, Alexandra B.; Agnes LUT; aja.decoteau@critfc.org;
Paulson, Anthony J.; baptista@stccmop.org; bard@critfc.org;
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scott.e.english@usace.army.mil; Cox, Stephen E.; ShaneB@dcupud.org;
Parkinson, Sharon E; Steve.T.Juul@usace.army.mil; tdresse@gcpud.org;
Terry Buchholz; 'Lundell, Tina M NWP'; tjllewelllyn@bpa.gov; 'Frantz,
Waikele M.'; waikele.hampton@chelanpud.org; 'Proctor, William D NWD'
Subject: Re: Treaty Review: STT Water Quality Work Group Discussion of
Temperature Metrics, Locations and Models

All -Sorry I missed the meeting yesterday. Our office was closed
(snow).

A few comments:

- I have not seen a compelling argument for building a new
temperature model of the Columbia/Snake. There is an existing 1D model
(RBM10) that meets all of the criteria in Bill Proctor's presentation,
and possibly even two models (MASS1 developed by PNNL). So it is very
unclear how building/stitching a new W2 model of the entire basin is
"efficient" per the presentation.

- Question: Does the Treaty alternatives analysis require
investigation of changes in stratification behind the dams (e.g.,
predicted surface temperature of an impoundment) or is the cross
sectional average temperature of the river an acceptable metric for
comparison of alternatives? The answer sends us in the direction of a
1D or 2D model.

- I can support this new W2 project if the new model will be of
sufficient quality to develop TMDLs and/or other Clean Water Act related
analyses for the basin (and/or subbasins). Otherwise, pending a
definitive answer to the 1D vs 2D question above, I do not see a good
cost-benefit basis for a new W2 model.

- Along the same lines (future use), if the W2 project moves
forward, I'd request a commitment from the Treaty workgroup and
contracting agencies that a new W2 model will be fully documented and
shared with all agencies of the workgroup (including EPA and the states)
upon completion. This means making all model source code and input
files available via ftp or mailed CDs.

Thanks for the discussion. -BC

Ben Cope, Environmental Engineer
Office of Environmental Assessment
EPA Region 10
Seattle, Washington
206-553-1442

-----Stewart Rounds wrote: -----

To: "Parkinson, Sharon E"
From: Stewart Rounds
Date: 01/19/2012 08:37AM
Cc: Terry Buchholz , "Etheridge,
Alexandra B." , Agnes LUT ,
"aja.decoteau@critfc.org" , "Paulson, Anthony
J." , "baptista@stccmop.org" ,
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 , "Easthouse, Kent B NWS"
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 , "Gelfenbaum, Guy R."
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 "tjllewellyn@bpa.gov" ,
 "waikele.hampton@chelanpud.org" ,
 "Postlethwait, Lori" , "'Proctor, William D
NWD'" , "'Frantz, Waikele M.'"
 , 'LUT Agnes' ,
 Ben Cope/R10/USEPA/US@EPA, "'Lundell, Tina M NWP'"
 , Stewart A Rounds

Subject: Re: Treaty Review: STT Water Quality Work Group Discussion of
Temperature Metrics, Locations and Models
Hi.

SNTEMP and SSTEMP are very good models when used for their intended
purposes.

I am not sure, however, that our needs can be met with those tools.

Just for everyone's information, SSTEMP (Stream Segment TEMPerature
model) is
a much-scaled down version of SNTEMP (Stream Network Temperature Model).
SSTEMP handles only single stream segments for a single time period
(e.g., month,
week, day), is best used for a variety of simple cases, and is
especially useful
as a teaching tool and a sensitivity analysis tool.

SNTEMP is a one-dimensional stream temperature model that handles large
branched
stream networks, has a full heat budget, and is useful for evaluating
many problems
and for use with instream biological assessments. Its major drawback
for our
purposes is that it uses a dynamic temperature, steady-state flow
formulation.
Flows are assumed to be essentially constant for the model averaging
period,
which is a minimum of one day. More information can be obtained at
<http://www.fort.usgs.gov/Products/Software/SNTEMP/>. It's a good model,
and has
many uses, but I'm not sure it is suitable for our needs in evaluating
conditions in the Columbia River system that will include widely varying
flows.
Of course, different opinions are welcome.

Hope this helps.

-Stewart Rounds
USGS

On 1/19/2012 7:54 AM, Parkinson, Sharon E wrote:

> All,

>

> Just one house keeping item: The reservoir temperature model we are using is CE-QUAL-W2. QUAL 2E is a 1-D nutrient model. I have also included the document describing the heat budget model of the Columbia River System developed by EPA back in 2001. Only concern I have is with it calibrating to today's operations. They noted in the report that Lake FDR is modeled with CEQUAL W2 and the tailrace (head of Chief Joseph) is used in the RBM10 analysis. In addition, meteorological data infill was used to complete the period of record for their analyses at various locations.

>

> I would encourage the evaluation of SNTMP or SSTEMP models developed by the USGS. They are simplistic 1-D models that I have utilized in the past that provide reasonable results for the study objectives that we were trying to accomplish at the time. Based on our conversations yesterday, it would be worth looking into as well.

>

> I appreciated the discussions yesterday, and looking forward to the next one!

>

> Sharon

>

> Sharon Parkinson, P.E.

>

> Bureau of Reclamation

>

> Pacific Northwest Region

>

> phone: 208.378.5053

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> email: sparkinson@usbr.gov

>

> *From:*Terry Buchholz [mailto:terry@integratedwatersolutions.net]

> *Sent:* Wednesday, January 18, 2012 8:48 PM

> *To:* Etheridge, Alexandra B.; Agnes LUT; aja.decoteau@critfc.org;

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Postlethwait, Lori; 'Proctor, William D NWD'

> *Cc:* 'Frantz, Waikele M.'; 'LUT Agnes'; 'Ben Cope'; 'Lundell, Tina M NWP'; lauren@integratedwatersolutions.net

> *Subject:* Treaty Review: STT Water Quality Work Group Discussion of Temperature Metrics, Locations and Models

> *Importance:* High

>

> STT Water Quality Work Group:

>

> Thank you for your participation in the Temperature/TDG Sub-Group

webmeeting today. Meeting notes will be distributed next week, but I wanted to make sure that you had the action items from today's meeting. The ACTION ITEMS are as follows:

>
> 1.Issue a Request for Proposals (RFP) for the development of the Lower Columbia River CEQUAL-2E models. */(NWP [Bruce Duffe] by January 27, 2012)/*
>
> 2.Issue a Request for Proposals (RFP) for the "stitching together" the mainstem Columbia River CEQUAL-2E. This will include the development of the model framework. */(NWP [Bruce Duffe] by February 4, 2012)/*
>
> 3.Send a request to mid-Columbia PUDs with regards to the use of existing mid-Columbia temperature models and the potential of developing CEQUAL-2E models for the mid-Columbia reaches the that do not CEQUAL-2E models. */(NWD [Bill Proctor] by January 25, 2012)/*
>
> 4.Evaluate existing analytical methods that could be used as a.) Qualitative tools to evaluate temperature changes both spatially and temporally for a range of treaty alternatives; and/or b.) A Back-up if CEQUAL-2E models are not ready temperature modeling scoped in Iteration #2 and #3*/. (USGS[Stuart Rounds] by February 11, 2012)/*
>
> We also decided to present the information for the above action items at the next STT Water Quality Work Group Meeting, scheduled for Wednesday, February 15th from 1 - 4 pm. (Location TBD)
>
> Please let me know if you have any revisions/refinements to the Action Items. I will track progress for the Action Items on a weekly basis.
>
> Thank you,
>
> Terry Buchholz, PE, CWRE
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